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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,046	08/26/2005	Stefan Gustafsson	3660-43	1437
23117 7590 02/18/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
ADDY, ANTHONY S				
ART UNIT		PAPER NUMBER		
2617				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/538,046

**Applicant(s)**

GUSTAFSSON ET AL.

**Examiner**

ANTHONY S. ADDY

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 08, 2009 has been entered. **Claims 1-10** are pending in the present application.

### ***Response to Arguments***

2. Applicant's arguments filed on January 08, 2009 have been fully considered but they are not persuasive.

In response to applicant's argument that, "Lundin fails to disclose, teach or suggest selecting among at least two positioning protocols including an SS7-based positioning protocol and an IP-based positioning protocol a suitable positioning protocol for communication of location information associated with the position of the mobile station with the current network based on the identity of the current network, since Lundin describes only one positioning protocol (see page 5, fourth paragraph and page 6, second paragraph of the response)," examiner respectfully disagrees and maintains that Lundin in view of Lindgren/AAPA teaches the limitations as claimed. Examiner reiterates that contrary to Applicants' assertions that, only one positioning protocol is described and used in Lundin, Lundin teaches or suggests selecting between one of

multiple alternative positioning protocols such as a positioning roaming protocol (PRP), MTP/SCCP, IP based, frame relay, X25, or ATM protocols for supporting inter-networking roaming in a system that offers positioning services (see p. 3 [0023]).

Examiner respectfully reiterates that although, Applicant's claims recite multiple alternative positioning protocols such as an SS7-based positioning protocol and an IP-based, Applicant dynamically selects from among at least two positioning protocols including an IP-based positioning protocol which is met by Lundin, since Lundin teaches selecting between one of multiple alternative positioning protocols such as a positioning roaming protocol (PRP), MTP/SCCP, IP based, frame relay, X25, or ATM protocols for supporting inter-networking roaming in a system that offers positioning services (see p. 3 [0023]). Examiner agrees with Applicant's argument that Lundin fails to teach an SS7-based positioning protocol, however Lundin meets the limitations as claimed, since Applicant dynamically selects from among at least two positioning protocols including an IP-based positioning protocol which is met by Lundin as discussed above. Furthermore, the use of an SS7-based positioning protocol is very well known in the art as taught for example by Lindgren (see col. 2, lines 20-24 and col. 4, lines 32-41) and the prior art admitted by applicant, disclosed on page 3, lines 1-27 of the original disclosure of the present specification, hence it is obvious Lundin in view of Lindgren/AAPA teach or suggest the claimed limitations of "selecting among at least two positioning protocols including an SS7-based positioning protocol and an IP-based positioning protocol a suitable positioning protocol for communication of location information associated with the position of the mobile station with the current network

based on the identity of the current network," since Lundin teaches selecting between one of multiple alternative positioning protocols such as a positioning roaming protocol (PRP), MTP/SCCP, IP based, frame relay, X25, or ATM protocols for supporting inter-networking roaming in a system that offers positioning services.

Furthermore it appears applicant is arguing against the references individually, however it has been held that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In view of the above, the 35 U.S.C. 103(a) rejections using Lundin in view of Lindgren/AAPA with regard to claims 1-10 are proper and are maintained as repeated below.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lundin, U.S. Publication Number 2001/0003093 A1 (hereinafter Lundin)** in view of **Lindgren et al., U.S. Patent Number 6,411,632 (hereinafter Lindgren)** or in view of **Applicant's Admitted Prior Art** (page 3, lines 1-27 of original disclosure).

Regarding claims 1 and 5, Lundin teaches a system (see Fig. 2) and a method (see Fig. 5) for obtaining the position of a mobile station (16) located in a current network of a communications system including a plurality of networks (*i.e.*, *local PLMN*

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47 and remote PLMN 50) supporting different positioning protocols (see p. 2 [0022], p. 3 [0023], p. 4 [0028] and Figs. 1, 2 & 5), comprising: identifying at a location center (e.g., MPC 52 or MPC 60) the current network (i.e., local PLMN 47 or remote PLMN 50) of said mobile station (16) (see p. 2 [0022], p. 3 [0025] and p. 4 [0028]), and based on said identified current network (6) and roaming capability information, dynamically selecting from among at least two positioning protocols including an **IP-based** positioning protocol and *MTP/SCCP, frame relay, X25, or ATM protocols*, a suitable positioning protocol (e.g., **IP-based protocol** and *MTP/SCCP, frame relay, X25, or ATM protocols*) for communication with said current network (6) of location information associated with the position of the mobile station (see p. 3 [0025-0026] and p. 4 [0028-0029]).

Although, Lundin fails to explicitly teach selecting a protocol that includes an SS7-based positioning protocol based on said identified current network, Lundin, however, teaches the use of a plurality of protocols, such as a positioning roaming protocol (PRP), IP based protocols, frame relay, ATM protocols e.t.c., for supporting internetworking roaming and offering positioning services; and further teaches **a mobile positioning center (MPC) tailors position information based on an underlying protocol according to a particular system or network requirement** (see p. 3 [0023] and p. 4 [0028-0029]).

In an analogous field of endeavor, Lindgren teaches a network hub interconnects a first public access cellular telephone network and a second network, and the network hub includes processing means for converting signals from being carried by the SS7

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protocol to the TCP/IP protocol and vice versa (see col. 2, lines 20-24). According to Lindgren, the adaptation layer within the network hub acts as a translation interface between the different protocols, and the conversion between transportation of the SS7 protocol or the TCP/IP protocol is performed by processing means within the network hub, and enables connection between the first and second networks (see col. 4, lines 32-41).

Moreover, the prior art admitted by applicant, disclosed on page 3, lines 1-27 of the original disclosure of the present specification (hereinafter simply referred as “the Admitted Prior Art”) teaches a GMLC has information to select a SS7 protocol/IP protocol to be used in the communication of positioning data with a specific PLMN.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Lundin with the teachings of either Lindgren or the teachings of the Admitted Prior Art to include a method of selecting a protocol that includes an SS7-based positioning protocol based on said identified current network, in order to tailor position information based on an underlying protocol according to a particular system or network requirement.

Regarding claim 2, Lundin in view of Lindgren or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. Lundin in view of Lindgren or the teachings of the Admitted Prior Art further teaches a method, where before identifying the current network of the mobile station, the method further comprises: receiving at said location center a positioning request (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), identifying the subscriber's home network, based on said identified home

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network (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), selecting a suitable positioning protocol for communication with said home network (see *Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Admitted Prior Art*, page 3, lines 1-27), sending a routing information request to the home network, receiving an answer from the home network, and analyzing the answer for identifying the current network of the mobile station (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 3, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches a method, further comprising: sending a position information request to the current network, and receiving an answer including location information about the subscriber from the current network (see *Lundin*, p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 4, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches a method, wherein any of the SS7 protocol, MLP or IP roaming protocol is selected (see *Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029]).

Regarding claim 6, *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the Admitted Prior Art further teaches an apparatus, further comprising: a receiving component and a sending component, wherein said receiving component is configured to receive a positioning request from an location services (see *Lundin*, p. 2

[0022], p. 3 [0025] and p. 4 [0028]), wherein said processing component is configured to identify a home network for the subscriber; and based on said identified home network (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]), select a suitable positioning protocol from said positioning protocols for communication with said home network (see *Lundin*, p. 3 [0023 & 0025] and p. 4 [0028-0029] and *Admitted Prior Art*, page 3, lines 1-27), said sending component is configured to send a routing information request to the home network, said receiving component is configured to receive an answer from the home network, and said processing component is configured to analyze the answer for identifying the current network of the mobile station (see *Lundin*, p. 2 [0022], p. 3 [0025] and p. 4 [0028]).

Regarding claim 7, *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* further teaches an apparatus, characterised in that said sending component is configured to send a routing information request to the visited network, and said receiving component is configured to receive an answer including location information about the roaming subscriber from the visited network (see *Lundin*, p. 2 [0022], p. 3 [0026] and p. 4 [0028]).

Regarding claim 8, *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* teaches all the limitations of claim 5. *Lundin* in view of *Lindgren* or the teachings of the *Admitted Prior Art* further teaches an apparatus, wherein said positioning protocols are any of the SS7 protocol, and/or GMLC-centric IP roaming protocol and/or location middleware IP roaming protocol (see *Lundin*, p. 3 [0023]).

Regarding claims 9 and 10, Lundin in view of Lindgren or the teachings of the Admitted Prior Art teaches all the limitations of claim 1. Lundin in view of Lindgren or the teachings of the Admitted Prior Art further teaches a computer program stored in a record medium, computer memory, or read-only memory and comprising executable instructions which when executed cause a computer to perform the method of claim 1 (see *Lundin*, p. 4 [0028] and Fig. 5).

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY S. ADDY whose telephone number is (571)272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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Examiner, Art Unit 2617

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